No. 7600042

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Rilcot Seed Co., Division of Riley Yieldmaster Seed Corporation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS [illegible] THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Rilcot 90-A'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington, *this* 11th *day of* March *in the year of our Lord one thousand nine hundred and* eighty-two.

PLANT VARIETY PROTECTION OFFICE · U.S. DEPARTMENT OF AGRICULTURE

Attest:

Kenneth H. Evans
Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R Block
Secretary of Agriculture

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
Rilcot 90-A	Cotton	PV NUMBER 7600042
3. GENUS AND SPECIES NAME	**4. FAMILY NAME** *(Botanical)*	FILING DATE 2-17-76 / TIME 12:30 P.M.
Gossypium hirsutum	Malvaceae	FEE RECEIVED $ 250.00 $ 250.00 $ 250.00 / BALANCE DUE $ — $ $ 12/29/81
	5. DATE OF DETERMINATION November 15, 1974	

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Rilcot Seed Co., Division of Riley Yieldmaster Seed Corporation	Rt. 2 Box 96 Hart, Texas 79043	806-647-5130 846-2435

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Texas	April 6, 1960

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Ray Joe Riley
Rt. 2 Box 96
Hart, Texas 79043

13. **CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:**

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [X] 13C. Exhibit C, Objective Description of the Variety
- [X] 13D. Exhibit D, Data Indicative of Novelty
- [X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [X] FOUNDATION [X] REGISTERED [X] CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

2-11-76 (DATE) — Ray Joe Riley (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

Attachment to Form GR-470

Exhibit A, Origin and Breeding History of the Variety

The line of cotton designated and tested as Rilcot 90-A resulted from selections made from the Rilcot 90 variety.

The original plant selections were dade for stormproofness, earliness, yield, vigor, and staple length.

The original selections were made and planted plant to row for identification.

Progeny of the plant rows of near identical types were massed and bulked after yield and fiber testing to verify uniformity.

The original selections were made in 1969.

Riley Yieldmaster Seed Corporation
General Office Sunnyside Community
PHONE SUNNYSIDE (806) 846-2435
Mailing Address
Rt. 2 Box 96
HART, TEXAS 79043

May 11, 1976

Mr. J. J. Higgins, Examiner
Plant Variety Protection Office
National Agricultural Library
Beltsville, Maryland 20705

Dear Mr. Higgins:

Reference is made to your letter of April 12, 1976 concerning Cotton Application No. 7600042, "Rilcot 90-A".

In regard to Exhibit A, Rilcot 90-A is stable and only an occassional off type occurs as a frequency of less than 1 plant per 2,500 population on a strict evaluation. Variants would tend to be open boll types, with larger bolls and/or taller plants.

For Exhibit C, under No. 4, Plant Habit, the Foliage is sparse. Under No. 19, the 22.6 should be for 1/8" guage.

In Exhibit D, I enclose some additional information which will show under Table 4. Results of the Irrigated Supplemental Cotton Variety Test at Lubbock, 1975, that Rilcot 90-A is significantly higher in micronaire and fiber length uniformity than Rilcot 90. In most tests, Rilcot 90-A has been stronger in fiber strength and longer in fiber length; however, the difference is small and is sometimes difficult to show statistically in all tests. Enclosed data from the Gaines County, 1973 tests as well as the 1973 Dawson County tests is representative and will bear this out. It is necessary to put a number of individual differences together to show a high probability of difference with a number of cases of differences showing up. Therefore; we should say in substantiation of novelty that Rilcot 90-A is significantly higher in fiber uniformity and higher, significantly in fiber micronaire.

I trust that this information will meet your requirements.

Sincerely,

Ray Joe Riley
RJR: sw
Encl.

Rilcot Seed Co.
Cottonseed Division
Box 1009
Phone (806) 385-5401
LITTLEFIELD, TEXAS 79339

OTHER OFFICES:
Dimmitt, Texas 79027
Phone (806) 647-3276
Kingsland, Texas 78639
Phone (915) 388-4693
Box 621
Bonham, Texas 75418
Phone (214) 583-4605
Rt. 1, Box 78

Exhibit B, Botanical Description of the Variety

The Seed of Rilcot 90-A is of the glanded type with short linters after saw ginning. The plants in the seedling emergence, cotyledon, and four leaf stages of growth are similar in vigor to the Rilcot 90 variety, taking into condiseration eqaul seed quality and strength. The Rilcot 90-A plants are prolific fruiting, setting a high percentage of the flowers blooming. Rilcot 90-A is characterized as being early, about 1 day earlier than Rilcot 90, and moderately determinant. The mature plant is medium tall, about the same height as Rilcot 90. The fruit is a round type, medium small boll borne on short stems containing both four and five locules per boll. The carpels curve inward to form a stormproof, tight boll type. The boll size is approximately 90 bolls per pound. The seed index is about 9.5 + or - .05. The lint index is approximately 5.4 to 6.0.

The flowers of Rilcot 90-A are complete, moderately large and are white to creamy colored on opening.

The root is a deep, vigorous taproot with laterals.

The stem is a main central stem with short vegetative and fruiting branches or laterals. Medium dark red colored stems and petioles are typical which in a matured or nonvegetative state of growth for that portion of the plant. Vegetative and actively growing parts are green colored. The leaves are medium sized for upland cotton and are three lobed.

The plant is medium tall in height and compact.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-8 (10-2-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C (Cotton)

OBJECTIVE DESCRIPTION OF VARIETY

COTTON (*GOSSYPIUM SPP.*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Rilcot Seed Co., Division of Riley Yieldmaster Seed Corp.

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
Rt. 2 Box 96, Hart, Texas 79043

FOR OFFICIAL USE ONLY

PVPO NUMBER
7600042

VARIETY NAME OR TEMPORARY DESIGNATION
RILCOT 90-A

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. SPECIES:

[1] 1 = GOSSYPIUM HIRSUTUM 2 = GOSSYPIUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

[0] EASTERN [0] DELTA [0] CENTRAL [2] HIGH PLAINS [0] EL PASO AREA

[0] WESTERN LOW HOT VALLEYS [0] SAN JOAQUIN [ ] OTHER (*Specify*) _____

3. MATURITY (50% Open Boll):

[0][9] NO. OF DAYS *EARLIER* THAN ..... [7]

[ ][ ] NO. OF DAYS *LATER* THAN ..... [ ]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (*Specify*) _____

4. PLANT HABIT:

[3] 1 = SPREADING 2 = INTERMEDIATE 3 = COMPACT

letter 5/11/76
[1] 1 = FOLIAGE SPARSE 2 = DENSE 3 = OTHER (*Specify*) _____

5. PLANT HEIGHT:

[ ][ ] CM. *SHORTER* THAN ..... [ ]

[0][9] CM. *TALLER* THAN ..... [7]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (*Specify*) _____

6. MAIN STEM:

[3] 1 = LAX 2 = ASCENDING 3 = ERECT

[12] CM. TO FIRST FRUITING BRANCH

[0][6] NO. OF NODES TO FIRST FRUITING BRANC (*from cotyledonary node*)

7. LEAF:

[0][9] CM. WIDTH OF WIDEST LEAVES AT MATURITY

8. LEAF PUBESCENSE:

[3] 1 = GLABROUS (HAIRS AS SPARSE AS D_2 SMOOTH)
2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213)
4 = HEAVY PUBESCENCE (H_1 OR H_2) 5 = OTHER (*Specify*) _____

9. LEAF COLOR:

[3] 1 = VIRESCENT YELLOW 2 = LIGHT GREEN 3 = DARK GREEN (*Acala-442*) 4 = RED
5 = OTHER (*Specify*) _____

10. LEAF TYPE:

[1] 1 = NORMAL 2 = OKRA 3 = SUPER OKRA 4 = OTHER (*Specify*) _____

11. FLOWER:

[2] 1 = NECTARILESS 2 = NECTARIED

[1] Petals: 1 = CREAM 2 = YELLOW [1] Pollen: 1 = CREAM 2 = YELLOW

12. FRUITING BRANCH TYPE:

[2] 1 = CLUSTER 2 = SHORT 3 = NORMAL [1] 1 = DETERMINATE 2 = INDETERMINATE

13. GOSSYPOL CONDITION:

[3] 1 = GLANDLESS 2 = REDUCED GLANDS 3 = NORMAL GLANDS
4 = OTHER (*Specify*) _____

[1] 1 = NORMAL BUD GOSSYPOL
2 = HIGH BUD GOSSYPOL

14. SEEDS:

[0][9][5] ± [0][5] SEED INDEX (*Fuzzy seed basis*)

[1] Seed Fuzz: 1 = SPARSE (GREGG 35) 2 = MODERATE (DPL-16)
3 = HEAVY (ACALA SJ-1) 4 = OTHER (*Specify*) _____

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MAY 17 1976 ← Received from Breeder -

2 SHEETS

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-8 (10-2-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C (Cotton)

OBJECTIVE DESCRIPTION OF VARIETY

COTTON (*GOSSYPIUM SPP.*)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)
Rilcot Seed Co.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)
HART TX.

FOR OFFICIAL USE ONLY

PVPO NUMBER
7310326

VARIETY NAME OR TEMPORARY DESIGNATION
Rilcot 90

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. SPECIES:

[1] 1 = GOSSYPIUM HIRSUTUM 2 = GOSSYPIUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

[0] EASTERN [0] DELTA [0] CENTRAL [2] HIGH PLAINS [0] EL PASO AREA

[0] WESTERN LOW HOT VALLEYS [0] SAN JOAQUIN [ ] OTHER (Specify) _____

3. MATURITY (50% Open Boll):

[0][9] NO. OF DAYS *EARLIER* THAN ..... [7]

[ ][ ] NO. OF DAYS *LATER* THAN ..... [ ]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (Specify) _____

4. PLANT HABIT:

[3] 1 = SPREADING 2 = INTERMEDIATE 3 = COMPACT

[1] 1 = FOLIAGE SPARSE 2 = DENSE 3 = OTHER (Specify) _____

5. PLANT HEIGHT:

[ ][ ] CM. *SHORTER* THAN ..... [ ]

[0][9] CM. *TALLER* THAN ..... [7]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (Specify) _____

6. MAIN STEM:

[3] 1 = LAX 2 = ASCENDING 3 = ERECT

[12] CM. TO FIRST FRUITING BRANCH

[0][4] NO. OF NODES TO FIRST FRUITING BRANC (*from cotyledonary node*)

7. LEAF:

[0][9] CM. WIDTH OF WIDEST LEAVES AT MATURITY

8. LEAF PUBESCENSE:

[3] 1 = GLABROUS (HAIRS AS SPARSE AS D_2 SMOOTH)
2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213)
4 = HEAVY PUBESCENCE (H_1 OR H_2) 5 = OTHER (Specify) _____

9. LEAF COLOR:

[3] 1 = VIRESCENT YELLOW 2 = LIGHT GREEN 3 = DARK GREEN (*Acala-442*) 4 = RED
5 = OTHER (Specify) _____

10. LEAF TYPE:

[1] 1 = NORMAL 2 = OKRA 3 = SUPER OKRA 4 = OTHER (Specify) _____

11. FLOWER:

[2] 1 = NECTARILESS 2 = NECTARIED

[1] Petals: 1 = CREAM 2 = YELLOW [1] Pollen: 1 = CREAM 2 = YELLOW

12. FRUITING BRANCH TYPE:

[2] 1 = CLUSTER 2 = SHORT 3 = NORMAL [1] 1 = DETERMINATE 2 = INDETERMINATE

13. GOSSYPOL CONDITION:

[3] 1 = GLANDLESS 2 = REDUCED GLANDS 3 = NORMAL GLANDS
4 = OTHER (Specify) _____

[1] 1 = NORMAL BUD GOSSYPOL 2 = HIGH BUD GOSSYPOL

14. SEEDS:

[ ][9][5] ± [0][5] SEED INDEX (*Fuzzy seed basis*)

[1] Seed Fuzz: 1 = SPARSE (GREGG 35) 2 = MODERATE (DPL-16) 3 = HEAVY (ACALA SJ-1) 4 = OTHER (Specify) _____

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Rilcot data summary, comparing Rilcot 90 and Rilc t 90-A(3 replications)

	1978	1979	1980	Average
Rilcot 90	3.5	3.23	4.06	3.596
Rilcot 90-A	3.65	3.34	4.26	3.750

	Rep. I	Rep. II	Rep. III	Rep IV	Ave.
1978					
Rilcot90	3.5	3.6	3.4	3.5	3.5
Rilcot 90-A	3.5	3.7	3.7	3.6	3.65
1979	3.3	3.2	3.2		3.23
Rilcot 90					
Rilcot 90-A	3.4	3.3	3.4		3.34
1980					
Rilcot 90	4.1	4.0	4.1		4.06
Rilcot 90-A	4.3	4.3	4.2		4.26

Summary from Rilcot micronaire records for 1978, 1979, 1980

Exhibit B, Data Indicative of Novelty

Novelty is based on the unique combination of the following characters:

'Bilcot 90-A' most nearly resembles 'Bilcot 90' except that it differs by being about one (1) day earlier than 'Bilcot 90' and 'Bilcot 90-A' is about .25 higher in micronaire than 'Bilcot 90'.

SUMMARY OF MICRONAIRE VALUE DATA

TEST	YEAR	TEST SITE	HILCOT 90 VALUE	HILCOT 90-A VALUE
Texas Agricultural Exp. Sta. Supp. Irrig. Cotton Variety	1974	Lubbock Station	3.63	3.88
Texas Agricultural Exp. Sta. Supp. Irrig. Cotton Variety	1975	Lubbock Station	2.65	3.03
		Average	3.14	3.46
Texas Agricultural Extension Service Cotton Variety Tests	1973	Gaines	4.20	4.25
	1973	Dawson	3.50	4.45
	1973	Lamb	4.90	4.70
	1974	Terry	3.70	4.00
	1974	Bailey	2.60	2.80
	1975	Lamb	3.20	3.50
		Average	3.68	3.95

RILCOT 90A SUMMARY OF DATA

Texas Agriculteral Experiment Station

YEAR	Micronaire	Test
1974	3.88	Lubbock Supplimental Variety
1971-1977	3.8	Lubbock Regional Dryland Variety
1977	4.3	Lubbock Regional Dryland
1977	4.4	Regional-Lamesa
1978	3.8	Lubbock Regional Irrigated
1975	3.03	Lubbock Supplemental Irrigated

3.87 - Average All Tests

3.46 average Same Comparitive Tests

Rilcot 90

Texas Agriculteral Experiment Station

Year	Micronaire	Test
1975	2.65	Lubbock-Irrigated Supp.
1974	3.63	Lubbock Irrigated
1976	Data Unavable Due to crop loss.	

3.14 Avg. all tests

3.14 Avg. same comparitive tests

R. B. METZER 1973

22) Rilcot 90

A variety with compact plant adapted to stripper harvesting. Selection from the old Macha variety; early maturing, resistant to Bacterial blight, but susceptible to Verticillium wilt. Fiber coarse with relatively high fiber strength. Well adapted for narrow-row production.

Average fiber properties

Bolls per pound - 90
Staple length (32nd) - 30
Upper half mean (UHM) - .90
Strength (1000 PSI) - 85
(range 74-101)
Micronaire - 3.6-4.9
Boll type - Stormproof

23) Rilcot 90A

A selection from Rilcot 90. This cotton is an improvement over Rilcot 90 in yield and earliness. It has shorter branches than Rilcot 90, which makes it better adapted for broadcast planting and stripper harvesting. Rilcot 90A is a moderately determinate (cut-out) cotton with close fruiting, stormproof bolls. Matures in approximately 120 days.

Average fiber properties

Bolls per pound - 90
Staple length (32nd) - 30-31
Upper half mean (UHM) - .95
Strength (1000 PSI) - 85
Micronaire - 3.5-4.5
Boll type - Stormproof

24) Stripper Cala S

This variety is a selection from CA 398 which is a breeding strain developed by the Texas Agricultural Experiment Station at Lubbock. Stormproof, good fiber length and strength.

Average fiber properties

Bolls per pound - 78
Staple length (32nd) - 32.2
(range 28-36)
Upper half mean (UHM) - 1.04
(range .91-1.04)
Strength (1000 PSI) - 90.4
(range 81.9-101.8)
Micronaire - 3.5 (range 2.4-4.5)
Boll type - Stormproof

25) Stripper N

This variety is a sister line of Stripper Cala S (selection of CA 398). Somewhat earlier than Stripper Cala S. Recommended for areas north of Lubbock. This variety has done well in narrow-row.

Average fiber properties

Bolls per pound - 84
Staple length (32nd) - 32-33
Upper half mean (UHM) - 1.00
(range .92-1.08)
Strength (1000 PSI) - 86.8
(range 79.4-100.4)
Micronaire - 3.5 (range 2.7-4.8)
Boll type - Stormproof

Summary of Data

Texas Agriculteral Extension Service

Year	Rilcot 90A Mike	Rilcot 90 Mike	Test Location
1973	4.25	4.2	Gaines
1973	3.9	Test lost	
1973	4.45	3.5	Dawson
1977	3.9	Test lost	
1978	4.1	Test lost	
	All test 4.1 Average	3.85	
	comparison of same tests 4.35 Average	3.85	
1975	3.5	3.2	Lamb
Grand all tests average	4.01	3.6	
Average in same tests	4.07	3.6	

TABLE 1. RILCOT VARIETY TESTS CONDUCTED BY RAY JOE RILEY, REGISTERED PLANT BREEDER

CASTRO COUNTY: 1970

Variety	Yield/Acre	Micronaire	Staple
Rilcot Stripper-N	680 lbs.	3.5	31/32"
Rilcot 90	664 lbs.	3.5	15/16"
Rilcot 90 - A	682 lbs.	3.6	15/16"
Rilcot Stripper Cala S	614 lbs.	3.3	33/32"
AVERAGE:	660 lbs.	3.4	

TABLE 2.

LAMB COUNTY: 1970

Variety	Yield/Acre	Micronaire	Staple
Rilcot Stripper-N	702 lbs.	3.5	31/32"
Rilcot 90	694 lbs.	3.6	29/32"
Rilcot 90-A	716 lbs.	3.5	15/16"
Rilcot Stripper Cala S	626 lbs.	3.3	33/32"
AVERAGE:	685 lbs.	3.4	

LINT YIELDS AND FIBER QUALITY DATA FOR BAILEY COUNTY 1971

Test Location	Variety	Lint Yields lbs/Plot	Lint Yields lbs/Acre *	Lint Turnout %	Micronaire	Fiber Length(in.)	UR	Strength	Grade & Staple
Marrow	Blanco 3363	.375	375	20.3	2.9	1.04	74	22	3130
Marrow	Rilcot 90-A	.282	282	20.3	2.8	.90	74	24	3129
Marrow	Early Cot 32	.320	320	19.9	3.0	1.02	74	22	3130
Marrow	Dunn 120	.342	342	18.4	2.9	1.04	74	23	3131
Marrow	Lockett 4789A	.423	423	19.8	2.8	1.08	75	22	3133
E. Shaw	Tamcot 788	.478	478	20.0	2.3	1.16	71	22	4134
E. Shaw	Gregg 45	.346	346	17.1	2.2	.97	71	20	3130
E. Shaw	Dunn 119	.423	423	17.3	2.3	1.14	74	23	5033
E. Shaw	Tamcot SP 21	.408	408	16.3	2.1	1.04	70	20	4132
E. Shaw	Paymaster 18	.375	375	20.0	2.7	.94	72	22	4129
E. Shaw	Rilcot 90	.445	445	19.4	2.6	.95	75	23	3129
E. Shaw	Pay Dwarf	.575	575	22.1	2.4	1.05	75	20	4131
Wedel	Gregg 45 (C)	.721	721	19.8	3.0	.96	76	21	4130
Wedel	Pay Dwarf	.578	578	17.6	2.4	1.02	75	22	4131
Wedel	Early Cot 31	.732	732	18.0	2.7	1.00	76	22	4132
Wedel	Gregg 45 (B)	.811	811	15.7	2.9	.96	75	23	4130
Wedel	Gregg 45 (A)	.924	924	16.4	2.8	.98	75	23	4130
Throckmorton	Dunn 118	.529	529	22.0	3.4	1.06	75	27	4132
Throckmorton	Paymaster 111A	.386	386	18.4	3.0	1.03	74	22	3132
Throckmorton	Stripper N	.439	439	21.4	3.1	.98	74	22	3130
Throckmorton	Rilcot 90	.487	487	22.4	3.9	.89	75	24	3128
Throckmorton	Early Cot 31	.509	509	20.8	3.2	.95	76	22	3130

* Assuming plot size to be 1/1000 acre (13 ft. of one 40-inch row).

91-16

Exhibit E, Statement of the Basis of Applicant's Ownership

The owner and applicant, Rilcot Seed Co., Division of Riley Yieldmaster Seed Corporation is the employer of the breeder, Ray Joe Riley, licensed Texas Registered Plant Breeder, and believes it is the sole, original and first breeder of Rilcot 90-A variety of cotton for which it solicits a certificate of protection.

7600042 RILCOT 90-A

FORM GR-470-8 (REVERSE)

15. BOLLS:

[2] Locules: 1 = 3-4, 2 = 4-5

[3 6] NO. SEEDS PER BOLL

[3 5 2] LINT PERCENT

[3 5] MM. DIAMETER

[2] Pitted: 1 = NONE, 2 = FINELY, 3 = COURSELY

[5 0 0] GRAMS SEED COTTON PER BOLL

[2] Breadth: 1 = BROADER AT BASE, 2 = BROADER AT MIDDLE

[1] Type: 1 = STORMPROOF (WESTBURN 70), 2 = STORM RESISTANT (LANKART 57), 3 = OPEN (DELTAPINE 16)

[2] Shape: 1 = LENGTH < WIDTH, 2 = LENGTH = WIDTH, 3 = LENGTH > WIDTH

16. BRACTEOLES:

[3] Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

[2] Teeth: 1 = FINE 2 = COURSE

[3] Teeth: 1 = 3-4 2 = 5-7 3 = 8-10 4 = OTHER (Specify) _____

17. YIELD: Compared to—

[ ] PERCENT *LESS* THAN .....

[ ] PERCENT *MORE* THAN .....

[ ] [4] 1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1 7 = LANKART 57

1 1 4

18. FIBER LENGTH (Complete one or more of the following and give the means):

[0 4 5] SPAN LENGTH 50%

[0 9 5] SPAN LENGTH 2.5%

[0 9 1] U.H.M. LENGTH

[ ] MEAN LENGTH

[3 0] STAPLE LENGTH 32nd INCHES

[ ] UNIFORMITY RATIO (MEAN/U.H.M.)

[4 7] UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION:

22.6 Gr/Tx Stelometer

[0 8 5] 1,000 P.S.I.

[0 7 4] ELONGATION ~~%~~

[0 4 0] 0" guage STILOMETER ~~%~~

[4 2 5] MICRONAIRE READING

[817.5] YARN STRENGTH (Give test method) (Grams) Average break

[1.9 4] 1/8 guage STILOMETER ~~%~~

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[1] VERTICILLIUM WILT	[0] FUSARIUM WILT	[0] ROOT KNOT NEMATODE	[2] BACTERIAL BLIGHT (Race 1)
[0] BACTERIAL BLIGHT (Race 2)	[0] ASCOCHYTA BLIGHT	[0] PHYMATOTRICHUM ROOT ROT	[0] RHIZOCTONIA
[0] ANTHRACNOSE	[0] RUST	[ ] OTHER (Specify)	

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] BOLL WEEVIL	[0] APHID	[0] FLEAHOPPER	[0] LEAFWORM
[0] FALL ARMYWORM	[0] GRASSHOPPER	[0] LYGUS	[0] PINK BOLLWORM
[0] STINKBUG	[0] THRIP	[0] CUTWORM	[0] SPIDERMITE

[ ] OTHER (Specify) _____

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(1) Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.

(2) Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.

RILCOT 90

FORM GR-470-8 (REVERSE)

15. BOLLS:

[2] Locules: 1 = 3-4, 2 = 4-5 | [36] NO. SEEDS PER BOLL | [352] LINT PERCENT | [35] MM. DIAMETER

[2] Pitted: 1 = NONE, 2 = FINELY, 3 = COURSELY | [500] GRAMS SEED COTTON PER BOLL | [2] Breadth: 1 = BROADER AT BASE, 2 = BROADER AT MIDDLE

[1] Type: 1 = STORMPROOF (WESTBURN 70), 2 = STORM RESISTANT (LANKART 57), 3 = OPEN (DELTAPINE 16) | [2] Shape: 1 = LENGTH < WIDTH, 2 = LENGTH = WIDTH, 3 = LENGTH > WIDTH

16. BRACTEOLES:

[3] Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

[2] Teeth: 1 = FINE 2 = COURSE | [3] Teeth: 1 = 3-4 2 = 5-7 3 = 8-10 4 = OTHER (Specify) _____

17. YIELD: Compared to–

[ ] PERCENT *LESS* THAN ..... [ ]

[114] PERCENT *MORE* THAN ..... [4]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1 7 = LANKART 57

18. FIBER LENGTH (Complete one or more of the following and give the means):

[044] SPAN LENGTH 50% | [094] SPAN LENGTH 2.5% | [090] U.H.M. LENGTH

[ ] MEAN LENGTH | [30] STAPLE LENGTH 32nd INCHES

[ ] UNIFORMITY RATIO (MEAN/U.H.M.) | [46] UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION:

4.01 0" Stelometer

[85] 1,000 P.S.I. | [ ] ELONGATION E_1 | [ ] STILOMETER T_0

[425] MICRONAIRE READING | [ ] YARN STRENGTH (Give test method) _____ | [ ] STILOMETER T_1 1/8 Stelometer

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[1] VERTICILLIUM WILT	[0] FUSARIUM WILT	[0] ROOT KNOT NEMATODE	[2] BACTERIAL BLIGHT (Race 1)
[0] BACTERIAL BLIGHT (Race 2)	[0] ASCOCHYTA BLIGHT	[0] PHYMATOTRICHUM ROOT ROT	[0] RHIZOCTONIA
[0] ANTHRACNOSE	[0] RUST	[ ] OTHER (Specify) _____	

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] BOLL WEEVIL	[0] APHID	[0] FLEAHOPPER	[0] LEAFWORM
[0] FALL ARMYWORM	[0] GRASSHOPPER	[0] LYGUS	[0] PINK BOLLWORM
[0] STINKBUG	[0] THRIP	[0] CUTWORM	[0] SPIDERMITE
[ ] OTHER (Specify) _____			

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(1) Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.

(2) Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.